

S/N: 09/454,103

REMARKS

Claims 1-25 were pending in this case and were restricted. Claims 19-23 have been withdrawn from consideration. Claims 1-4, 6, 12, 14-16, 24 and 25 have been amended, and reconsideration of the claims is respectfully requested.

Applicant amends the specification at page 7, lines 14-24 to describe the invention as illustrated in Figure 2. The amendment describes the embodiment in Figure 3 in which the axis about which the large diameter section is arranged is parallel to the axis about which the smaller diameter section is arranged. This amendment does not add any new matter because defining a distance X between this two axes does not make sense if they are not parallel. Otherwise there can not be a consistent distance between these axes as shown in Figure 3. Figure 3 has only been amended to provide reference number for these axes.

Rejection Under 35 U.S.C. § 102

Applicant has amended the drawings, specification and claims 1-4, 6, 12, 14-16, 24 and 25 in order to expedite prosecution of the present application. However, applicant maintains that the Examiner's rejection under 35 U.S.C. § 102 was inappropriate. Therefore, applicant will pursue claims 1-4, 6, 12, 14-16, 24 and 25 as originally presented in a continuation application.

Claims 1, 2, 4-7, 12, 24, and 25 are rejected under § 102(b) as being anticipated by Peickert '813. Claim 1 has been amended to include the limitation -- "wherein the first axis is parallel to the second axis and the relatively large inlet tube section in axial offset relation to the relatively small necked down outlet tube section." Claim 24 has been amended to include the limitation "with axially offset parallel tube sections." Claim 25 has been amended to include the limitation "in axially off-set parallel relation." The antecedent basis for these amendments occurs in Figure 3. Figure 3 shows that the axis for the large diameter section is parallel to the axis for the smaller diameter section. Furthermore, claims 1-4, 6, 12, 14-16, 24 and 25 have been amended to change "large inlet opening" to "large inlet

tube section" and to change "small necked down outlet opening" to "small necked down outlet tube section." The antecedent basis for these amendments in Figure 3 and in the unamended specification on page 7, lines 14-24. Peickert does not teach a filler neck in which a large inlet tube section is parallel to a small necked down outlet tube section. Instead, Peickert teaches an "insert . . . designed for use with a gasoline filler neck" ('813, col. 1, ll. 43-44) The filler neck illustrated in Peickert is bent so that the larger opening section is not parallel the smaller outlet section (Peickert, Figure 2.)

Applicant still maintains that Peickert neither teaches "a one-piece seamless funnel member" (originally filed claim 1 and first amended claims 24 and 25) nor "a large inlet opening" in an off-set axial relation to a "relatively small necked down outlet opening" as required by originally filed claims 1 and claim 25. Furthermore, Peickert does not teach or suggest that a bent arrangement will "induce a sufficient swirl to the fuel being supplied so as to create a sufficient vacuum to prevent fuel vapors from escaping into the atmosphere" (claim 1) nor does it suggest a "seamless configuration [which] induces a sufficient swirl to create a hollow passage for venting vapors from the gas tank during fuel filling;" (claim 24).

Rejection Under 35 U.S.C. § 103

Applicant has amended the drawings, specification and claims 1-4, 6, 12, 14-16, 24 and 25 in order to expedite prosecution of the present application. However, Applicant maintains that the Examiner's rejection under 35 U.S.C. § 103 is inappropriate and intends to pursue claim 1-18 and 24-25 as originally filed in a continuation application.

Claims 1-10, 12, and 25 are rejected under § 103(a) as being unpatentable over Whitely, II et al. in view of Peickert. Whitely, II discloses a filler neck with a barb to accept a plastic tube, but as the Examiner has pointed out Whitely, II does not disclose a seamless filler neck nor the use of an adhesive, resistance weld, or weld for attaching a tubular element to the funnel member. Claim 1 has been amended to include the limitation "wherein the first axis is parallel to the second axis and the relatively large inlet tube section in axial offset relation to the relatively small necked down outlet tube section." Claim 25 has been amended

S/N: 09/454,103

to include the limitation "in axially off-set parallel relation." As discussed above Peickert does not teach either of these limitations. Accordingly, the combination of Whitely and Peickert do not teach or suggest the seamless filler neck of independent claims 1 and 25.

Claim 11 is rejected under § 103(a) as being unpatentable over Peickert in view of Bates '179. Peickert discloses a filler neck. Bates discloses a filler neck with an anti-corrosive coating. As set forth above, Pilchard does not disclose the following limitation "wherein the first axis is parallel to the second axis and the relatively large inlet tube section in axial offset relation to the relatively small necked down outlet tube section" in amended claim 1. Accordingly, the combination of Whitely, II and Peickert does not teach or suggest the seamless filler neck of independent claims 1 from which claim 11 depends.

Claim 11 is rejected under § 103(a) as being unpatentable over Whitely, II et al. in view of Peickert as applied to claim 1, and further in view of Bates '179. Whitely discloses a filler neck but not the "anti-corrosive coating" disclosed in claim 11. As set forth above, Peickert does not teach the limitation "wherein the first axis is parallel to the second axis and the relatively large inlet tube section in axial offset relation to the relatively small necked down outlet tube section" of amended claim 1. Accordingly, the combination of Whitely, Bates, and Peickert does not teach or suggest the seamless filler neck of independent claim 1 from which claim 11 depends.

Claims 13-18 are rejected under § 103(a) as being unpatentable over Peickert. The Examiner states that these claims are obvious to one of ordinary skill in the art because the general conditions of the present invention have been disclosed in the prior art. As such, discovery of the optimal or workable ranges described in claims 13-18 are not patentable. *In re Aller*, 105 USPQ 233, 237 (CCPA 1955). However, the application of *In re Aller* to the present invention is inappropriate. As set forth above, Peickert does not teach the limitation "wherein the first axis is parallel to the second axis and the relatively large inlet tube section in axial offset relation to the relatively small necked down outlet tube section" of amended claim 1. Therefore, application of *In re Aller* to the present invention is inappropriate since

S/N: 09/454,103

claims 13-18 depend from claims which distinguish the prior art and are not attempting to patent optimal or workable ranges of a claim that otherwise distinguishes the prior art.

Accordingly, Peickert does not teach the seamless filler neck of amended independent claims 1, 24, and 25. As such, a combination of Peickert with either Whitely or Bates does not suggest or teach the invention of amended independent claims 1, 24, and 25. Allowance of claims 1-18, 24, and 25 is respectfully requested.

CONCLUSION

Applicant has made a genuine effort to respond to each of the Examiner's rejections in advancing the prosecution of this case. Applicant believes that all formal and substantive requirements for patentability have been met and that this case is in condition for allowance, which action is respectfully requested. The Examiner has indicated that he will confer with applicant's attorney upon reviewing this amendment.

Respectfully submitted,

PATRICK R. O'CONNELL

By James R. Proscia
James R. Proscia
Reg. No. 47,010
Attorney/Agent for Applicant

Date: February 15, 2001

BROOKS & KUSHMAN P.C.
1000 Town Center, 22nd Floor
Southfield, MI 48075
Phone: 248-358-4400
Fax: 248-358-3351

Attachment

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Page 7 beginning on line 14 and ending on line 24:

With reference to Figure 3, relatively large diameter section 46 forming the inlet opening 10 arranged about axis 47 and the spaced-apart relatively smaller diameter tubular section 48 arranged about axis 49 forming the outlet opening 22 are in an axially offset relationship. In one embodiment of the present invention, axis 47 and axis 49 are parallel. The large diameter section 46 and the small diameter tubular section 48 are connected to one another by tapered section 50 which gradually blends from the large diameter section 46 to the small diameter section 48. Tapered section 50 intersects large diameter section 46 at elliptically-shaped junction 52 which lies in a plane inclined at angle A which is 60-85° from the axis of the tubular sections. The funnel inlet opening 10 has a diameter D_1 of 60 mm and the tubular section has a diameter D_2 of 25 mm with a coaxial offset at a distance X which is 15 mm. This offset axial relationship is sufficient to achieve fuel swirl during fuel filling.

IN THE CLAIMS:

Amended claims 1-4, 6, 12, 14-16, 24 and 25:

1. (Amended) A filler neck for receiving a fuel supply nozzle for a motor vehicle fuel tank comprising:
a one-piece seamless funnel member having a tubular body defining [in off-set axial relation to each other] a relatively large inlet [opening] tube section arranged about a first axis adapted for attachment to a receptor for positioning the nozzle with respect to the large inlet [opening] tube section and a relatively small necked down outlet [opening] tube section arranged about a second axis adapted for attachment to the inlet of an elongated tubular member in communication with the fuel tank, wherein the first axis is parallel to the second

axis and the relatively large inlet tube section is in axial offset relation to the relatively small necked down outlet tube section and the positioning of the nozzle in combination with the offset axial relation [inducing] induces a sufficient swirl to the fuel being supplied so as to create a sufficient vacuum to prevent fuel vapors from escaping into the atmosphere.

2. (Amended) The filler neck of claim 1 wherein the inlet [opening] tube section is rolled over to create a surface to seal to the gas cap.

3. (Amended) The filler neck of claim 1 wherein the small necked down outlet [opening] tube section is barbed to adapt the [opening] tube section for attachment to a plastic tube insert.

4. (Amended) The filler neck of claim 1 wherein the small necked down outlet [opening] tube section is formed into a hose bead to adapt the [opening] tube section for attachment to a hose.

6. (Amended) The filler neck of claim 1 including the receptor and wherein the funnel member is drawn and provided with an attachment portion adjacent to the inlet [opening] tube section for attaching the receptor to the funnel member.

12. (Amended) The filler neck of claim 1 wherein the funnel member further comprises:

a relatively large diameter section forming the inlet [opening] tube section and a [spaced-apart] relatively smaller diameter [tubular] section forming the outlet [opening] tube section and wherein the axially offset large diameter and small diameter [tubular] sections are connected to one another by a tapered section which gradually blends from the large diameter section to the small diameter section.

14. (Amended) The filler neck of claim 12 wherein the funnel inlet [opening] tube section has a diameter D_1 and the tubular section has a diameter D_2 with a

S/N: 09/454,103

coaxial offset at a distance X where $.1D_2$ is less than X which is less than $.3D_2$, and where D_1 is at least one and a half times D_2 .

15. (Amended) The filler neck of claim 14 wherein the funnel inlet tube section axial offset is sufficient to achieve fuel swirl during fuel filling.

16. (Amended) The filler neck of claim 1 wherein the funnel inlet [opening] tube section has a diameter $D-1$ and the outlet [opening] tube section has a diameter $D-2$ where $D-1$ is at least one and a half times $D-2$.

24. (Twice Amended) A method of filling a gas tank with fuel from a tubular member comprising:

configuring at least a portion of a one-piece seamless tubular member with axially offset parallel tube sections such that the configuration induces a sufficient swirl to create a hollow passage for venting vapors from the gas tank during fuel filling; and filling the gas tank with fuel.

25. (Twice Amended) A filler neck for receiving a fuel supply nozzle for a motor vehicle fuel tank comprising:

a one-piece seamless funnel member having a tubular body defining in axially off-set [axial] parallel relation to each other a relatively large inlet [opening] tube section adapted for attachment to a receptor for positioning the nozzle with respect to the large inlet [opening] tube section and a relatively small necked down outlet [opening] tube section adapted for attachment to the inlet of an elongated tubular member in communication with the fuel tank.